

WHAT IS CLAIMED IS:

1       1. A non-contact type liquid level sensor, comprising:  
2              a sensor housing;  
3              a rotary shaft, rotatably mounted on the sensor housing;  
4              a float, vertically movable with a change of a liquid level;  
5              a float arm, having a first end mounted on the float, and a second end  
6              coupled to the rotary shaft such that the rotary shaft is rotated with a vertical  
7              movement of the float;  
8              an annular magnet, coupled to the rotary shaft, and rotating together  
9              with the rotary shaft;  
10             a pair of arcuate stators, disposed in the sensor housing so as to  
11             confront an outer peripheral surface of the magnet; and  
12             a magnetoelectric transducing element, disposed between the first  
13             ends of the stators, for detecting a change of a magnetic flux density in the  
14             stators, which is caused by a turn of the magnet, and for converting the  
15             detected change of the magnetic flux density into an electrical signal,  
16             wherein second ends of the stators are spaced from each other to  
17             form a gap having an opening angle within a range from 50° to 200°.

1       2. The non-contact type liquid level sensor as set forth in claim 1,  
2       wherein the arc lengths of the pair of stators are different from each other.

1       3. The non-contact type liquid level sensor as set forth in claim 1,  
2       wherein the opening angle of the gap is within a range from 90° to 180°.